

Release notes for ENDF/B Development n-098_Cf_251
evaluation



April 26, 2017

- **psyche** Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ISOTOPE MASS = 251. L = 0 / STRENGTH FUNCTION IS 1.05460E-03 / STRENGTH FUNCTION 1.05460E-03 / LIES OUTSIDE LIMITS 4.00000E-05 TO 2.00000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ISOTOPE MASS = 251. L = 0
STRENGTH FUNCTION IS 1.05460E-03
STRENGTH FUNCTION 1.05460E-03
... [1 more lines]
```

- **fudge-4.0** Warnings:

1. Potential scattering hasn't converted, you need more L's!
resonances / resolved / MultiLevel_BreitWigner (Error # 0): potentialScatteringNotConverged

WARNING: Potential scattering hasn't converged by L=0 at E=5.0 eV, xs[0]/xs[0]=100.0% > 0.1%

2. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.37%

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (8.215657e-09) is too small

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 3 (total): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n + Cf251): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 4 (n + Cf251): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 10 (n + (Cf251-e1 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.997099e-09) is too small

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 11 (n + (Cf251-e2 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.615727e-09) is too small

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 12 (n + (Cf251-e3 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.198048e-09) is too small

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 13 (n + (Cf251-e4 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (3.057448e-09) is too small

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 14 (n + (Cf251-e5 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (5.087048e-09) is too small

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 15 (n + (Cf251-e6 -> Cf251 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (1.566839e-11) is too small

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 ($n + (Cf251_e7 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (5.567557e-09) is too small
16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 17 ($n + (Cf251_e8 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (4.874925e-10) is too small
17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 ($n + (Cf251_e9 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (8.097124e-10) is too small
18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 ($n + (Cf251_e10 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (1.950817e-09) is too small
19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 20 ($n + (Cf251_e11 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (9.648450e-11) is too small
20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 21 ($n + (Cf251_e12 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (6.752485e-09) is too small
21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 22 ($n + (Cf251_e13 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (8.872763e-10) is too small
22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 23 ($n + (Cf251_e14 \rightarrow Cf251 + \gamma)$): / Form 'eval': (Error # 0): Condition num.
- WARNING: Ratio of smallest/largest eigenvalue (8.150013e-11) is too small

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 24 ($n + (Cf251_c \rightarrow Cf251 + \text{gamma})$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

24. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 25 ($Cf252 + \text{gamma}$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

25. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 26 ($n + Cf251$ [angular distribution]): / Form 'eval': (Error # 1): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

26. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 27 ($n[\text{multiplicity}:\text{'energyDependent'}, \text{emissionMode}:\text{'prompt'}] + n[\text{emissionMode}:\text{'6 delayed'} + \text{gamma} [\text{total fission}] [\text{spectrum}]]$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

27. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 28 ($n[\text{multiplicity}:\text{'energyDependent'}, \text{emissionMode}:\text{'prompt'}] + n[\text{emissionMode}:\text{'6 delayed'} + \text{gamma} [\text{total fission}] [\text{spectrum}]]$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

28. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 29 ($n[\text{multiplicity}:\text{'energyDependent'}, \text{emissionMode}:\text{'prompt'}] + n[\text{emissionMode}:\text{'6 delayed'} + \text{gamma} [\text{total fission}] [\text{spectrum}]]$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

29. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 30 ($n[\text{multiplicity}:\text{'energyDependent'}, \text{emissionMode}:\text{'prompt'}] + n[\text{emissionMode}:\text{'6 delayed'} + \text{gamma} [\text{total fission}] [\text{spectrum}]]$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

- fudge-4.0 Errors:

1. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_a} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (166978.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
2. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Distribution: / uncorrelated - angular - isotropic: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (166978.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (166978.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
 WARNING: Domain doesn't match the cross section domain: (212570.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
 ... plus 21 more instances of this message
3. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_b} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
4. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_c} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (166978.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
5. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_d} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (212570.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
6. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_e} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (212570.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
7. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_f} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (296888.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
8. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_g} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
9. Energy range of data set does not match cross section range

$$\text{reaction label 15: } n + (\text{Cf251_c} \rightarrow \text{Cf251} + \text{gamma}) / \text{Product: Cf251_c} / \text{Decay product: gamma_h} / \text{Multiplicity: (Error \# 0): Domain mismatch (a)}$$

- WARNING: Domain doesn't match the cross section domain: (212570.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
10. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (212570.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
11. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
12. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
13. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (296888.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
14. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
15. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
16. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
17. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)
18. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (296888.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

19. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

20. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (320573.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

21. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

22. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (296888.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

23. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (320573.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

24. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

25. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

26. Energy range of data set does not match cross section range
reaction label 15: n + (Cf251_c -> Cf251 + gamma) / Product: Cf251_c / Decay product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (103077.0 -> 20000000.0)

27. Calculated and tabulated Q values disagree.
reaction label 16: n[multiplicity:2] + Cf250 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -4819700.162139893 eV vs -5108490. eV!

28. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

29. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

30. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

31. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

32. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

33. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

34. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

35. Energy range of data set does not match cross section range
reaction label 16: n[multiplicity:'2'] + Cf250 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5129020.0 -> 20000000.0)

36. Calculated and tabulated Q values disagree.
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -11444846.0703125 eV vs -1.17336e7 eV!

37. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

38. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

39. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

40. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

41. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

42. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

43. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

44. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

45. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

46. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

47. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

48. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

49. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

50. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

51. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

52. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

53. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

54. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

55. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

56. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

57. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

58. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

59. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

60. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

61. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

62. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

63. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

64. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

65. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

66. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

67. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

68. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

69. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

70. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

71. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

72. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

73. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

74. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

75. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

76. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

77. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

78. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

79. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

80. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

81. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

82. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

83. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

84. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (12500000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

85. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

86. Energy range of data set does not match cross section range
reaction label 17: n[multiplicity:'3'] + Cf249 + gamma / Product: gamma_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (11780800.0 -> 20000000.0)

87. Calculated and tabulated Q values disagree.
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -17030307.69250488 eV vs -1.73191e7 eV!

88. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

89. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

90. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

91. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

92. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

93. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

94. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

95. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

96. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

97. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

98. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

99. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)

100. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)
101. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)
102. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)
103. Energy range of data set does not match cross section range
reaction label 18: n[multiplicity:'4'] + Cf248 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17388700.0 -> 20000000.0)
104. Calculated and tabulated Q values disagree.
reaction label 20: Cf252 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: 6460740.700164795 eV vs 6171950. eV!
105. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 17: n + (Cf251_c -> Cf251 + gamma) total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 0.14%
106. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 18: n[multiplicity:'2'] + Cf250 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.51%
107. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 19: n[multiplicity:'3'] + Cf249 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.92%
108. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 20: n[multiplicity:'4'] + Cf248 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.52%

109. Calculated and tabulated Q values disagree.
fissionComponent label 0: /reactionSuite/fissionComponents/fissionComponent[@label='0']
(Error # 0): Q mismatch
- ```
WARNING: Calculated and tabulated Q-values disagree: 234818994571.2804 eV vs 2.13386e8 eV!
```
110. Calculated and tabulated Q values disagree.  
*fissionComponent label 1: /reactionSuite/fissionComponents/fissionComponent[@label='1']*  
*(Error # 0): Q mismatch*
- ```
WARNING: Calculated and tabulated Q-values disagree: 234818994571.2804 eV vs 2.13386e8 eV!
```
111. Calculated and tabulated Q values disagree.
fissionComponent label 2: /reactionSuite/fissionComponents/fissionComponent[@label='2']
(Error # 0): Q mismatch
- ```
WARNING: Calculated and tabulated Q-values disagree: 234818994571.2804 eV vs 2.13386e8 eV!
```
112. Calculated and tabulated Q values disagree.  
*fissionComponent label 3: /reactionSuite/fissionComponents/fissionComponent[@label='3']*  
*(Error # 0): Q mismatch*
- ```
WARNING: Calculated and tabulated Q-values disagree: 234818994571.2804 eV vs 2.13386e8 eV!
```
113. A covariance matrix was not positive semi-definite, so it has negative eigenvalues.
Section 26 (n + Cf251 [angular distribution]): / Form 'eval': / LegendreLValue L=1 vs 1
(Error # 0): Bad evs

```
WARNING: 10 negative eigenvalues! Worst case = -4.454376e-04
```

- **njoy2012 Warnings:**

1. In some evaluations, the partial fission reactions MT=19, 20, 21, and 38 are given in File 3, but no corresponding distributions are given. In these cases, it is assumed that MT=18 should be used for the fission neutron distributions.
heatr...prompt kerma (0): HEATR/hinit (3)

```
---message from hinit---mt19 has no spectrum
mt18 spectrum will be used.
```

2. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (1): HEATR/hinit (4)

```
---message from hinit---mf6, mt 16 does not give recoil za= 98250
one-particle recoil approx. used.
```

3. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (2): HEATR/hinit (4)

```
---message from hinit---mf6, mt 17 does not give recoil za= 98249
one-particle recoil approx. used.
```

4. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (3): HEATR/hinit (4)

```
---message from hinit---mf6, mt 37 does not give recoil za= 98248
one-particle recoil approx. used.
```

5. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (4): HEATR/hinit (4)

```
---message from hinit---mf6, mt 51 does not give recoil za= 98251
one-particle recoil approx. used.
```

6. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (5): HEATR/hinit (4)

```
---message from hinit---mf6, mt 52 does not give recoil za= 98251
one-particle recoil approx. used.
```

7. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (6): HEATR/hinit (4)

```
---message from hinit---mf6, mt 53 does not give recoil za= 98251
one-particle recoil approx. used.
```

8. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (7): HEATR/hinit (4)

```
---message from hinit---mf6, mt 54 does not give recoil za= 98251
one-particle recoil approx. used.
```

9. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (8): HEATR/hinit (4)

```
---message from hinit---mf6, mt 55 does not give recoil za= 98251
one-particle recoil approx. used.
```

10. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (9): HEATR/hinit (4)

```
---message from hinit---mf6, mt 56 does not give recoil za= 98251
one-particle recoil approx. used.
```

11. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (10): HEATR/hinit (4)

```
---message from hinit---mf6, mt 57 does not give recoil za= 98251
one-particle recoil approx. used.
```

12. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (11): HEATR/hinit (4)

```
---message from hinit---mf6, mt 58 does not give recoil za= 98251
one-particle recoil approx. used.
```

13. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (12): HEATR/hinit (4)

```
---message from hinit---mf6, mt 59 does not give recoil za= 98251
one-particle recoil approx. used.
```

14. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (13): HEATR/hinit (4)

```
---message from hinit---mf6, mt 60 does not give recoil za= 98251
one-particle recoil approx. used.
```

15. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (14): HEATR/hinit (4)

```
---message from hinit---mf6, mt 61 does not give recoil za= 98251
one-particle recoil approx. used.
```

16. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (15): HEATR/hinit (4)

```
---message from hinit---mf6, mt 62 does not give recoil za= 98251
one-particle recoil approx. used.
```

17. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (16): HEATR/hinit (4)

```
---message from hinit---mf6, mt 63 does not give recoil za= 98251
one-particle recoil approx. used.
```

18. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (17): HEATR/hinit (4)

```
---message from hinit---mf6, mt 64 does not give recoil za= 98251
one-particle recoil approx. used.
```

19. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (18): HEATR/hinit (4)

```
---message from hinit---mf6, mt 91 does not give recoil za= 98251
one-particle recoil approx. used.
```

20. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (19): HEATR/hinit (4)

```
---message from hinit---mf6, mt102 does not give recoil za= 98252
photon momentum recoil used.
```

21. There is a problem with the fission energy release.
heatr...prompt kerma (20): HEATR/nheat (3)

```
---message from nheat---changed q from 2.133860E+08 to 2.019910E+08
for mt 18
```